

Appl. No. 09/752,089
Amdt. Dated July 14, 2004
Reply to Office Action of April 16, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A system for detection of error conditions when passing a cell stream at a particular transmission rate from a first location to a second location over multiple links, the system comprising:
 - a first unit at the first location coupled to one end of each of a plurality of low capacity data links for receiving the cell stream and inverse multiplexing the cell stream into frames that are transmitted over at least two ~~trained~~ data links trained to operate at optimal rates and selected from the plurality of low capacity data links that are set to active status; and
 - a second unit at the second location coupled to the other end of each of the plurality of low capacity data links for receiving the frames from each of the active trained data links and multiplexing the frame to produce the cell stream, wherein the first unit inserts at least one detection cell containing a predetermined pattern that is know by both the first unit and the second unit into each frame prior to transmission and the second unit analyzes the received detection cell to determine if an error condition exists.
2. (original) The system of claim 1 further comprising at least one data link selected from the plurality of low capacity data links that is trained and set to idle status, wherein the first unit and the second unit switch to use the trained idle data link to replace any one of the active trained data links that has failed and wherein the status of the idle data link is changed to active, thereby avoiding system down time due to line failure.
3. (currently amended) The system of claim 1, wherein the trained data links operate at an optimal rate.
4. (original) A method for enhancing error detection in a data stream transmitted from a first unit to a second unit, the method comprising:

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establishing a desired cell size for a detection cell and a frequency of insertion into the data stream;

determining a known signal that will be part of the detection cell;

inserting the detection cell with the known signal into the data stream being transmitted from the first unit to the second unit; and

analyzing the received detection cell at the second unit to determine if an error condition exists.